

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

301
06
3

FOOD NEWS

US A
DRAFT
AUG 18 1988

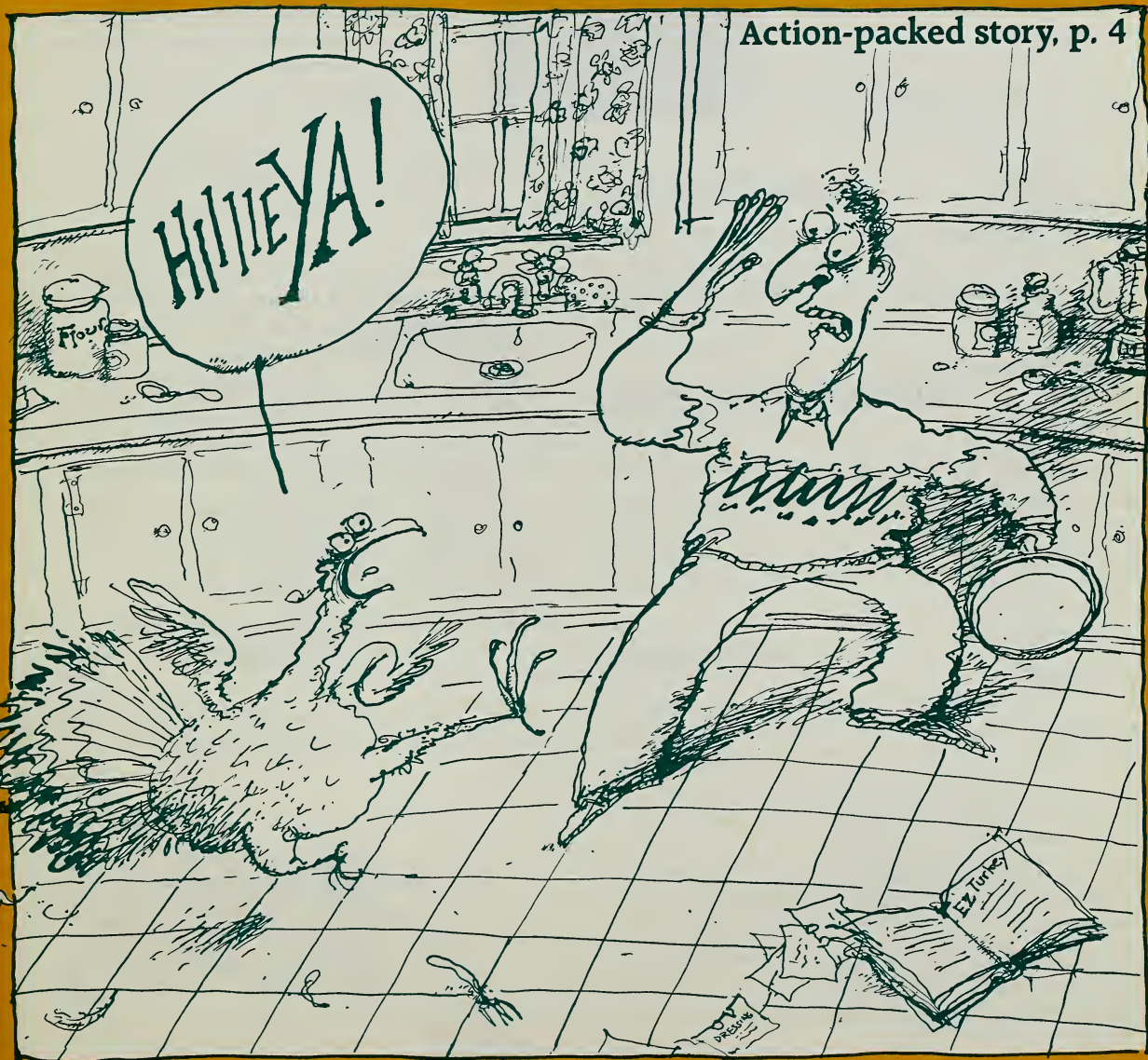
FOR CONSUMERS

United States Department of Agriculture

Volume 5 Number 3

Holidays 1988

REAL MEN FACE REAL TURKEYS in the Holiday Kitchen



Health Gifts
From Research

The *First* Food Safety
GAME!!!

Safe Shipping of
Mail-Order Foods

FOOD NEWS

FOR CONSUMERS

Holidays 1988
Vol. 5, No. 3

Contents of this magazine are intended for re-use. No permission is necessary.

This magazine is published by the U.S. Department of Agriculture, Food Safety and Inspection Service.

Administrator

Lester M. Crawford

Associate Administrator

Ronald J. Prucha

**Director, Information and
Legislative Affairs**

Jane Adams

Chief, Public Awareness

Laura Fox

Editor

Mary Ann Parmley
(202) 447-9351

News Wires Editor

Liz Lapping

Art Director

Richard J. Barnes

Cover Illustration

Richard Thompson

Photography

Lester Shepard

Production

Maxine Grant

Food News for Consumers is published four times a year. Subscription price is \$5.00 (domestic) or \$6.25 (foreign) per year. Send subscription orders to: Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Send comments and inquiries to: Editor, *Food News for Consumers*, FSIS/ILA, Room 1165 South, U.S. Department of Agriculture, Washington, D.C. 20250. Telephone: (202) 447-9351.

Ask the Consumer Advisor



Dear Consumer Advisor:

Is USDA active in the area of electronic dissemination of information?

Dear Reader:

Very much so! In fact, much of what you hear or read about from USDA may have come to you because of USDA's electronic dissemination program. For the past several years, USDA has been issuing a variety of information, from consumer-type materials to highly technical economic data, through electronic means.

USDA is just now launching a computerized consumer information service of interest to the general public, covering subjects other than food. This service will contain useful information about various subjects such as energy, recreation, textiles and gardening.

This "non-food" service, just now getting its feet wet, is in addition to the popular electronic service started more than two years ago that contains information about food and nutrition. It focuses on food economics, nutrition research, food safety, applied nutrition and food assistance.

Both computer services are designed to reach "retailers" of information who subscribe to USDA's electronic dissemination service. These retailers further disseminate information to their subscribers, who number in the thousands. The subscribers, in turn, distribute the materials to others, including consumers.

Consumers interested in receiving USDA information electronically are encouraged to subscribe to one of the retailers. Any desktop computer that can "talk" to another computer can receive USDA information directly through these sources. There is a fee, of course, which varies widely depending on the retailer.

Anyone who is interested in getting information electronically from one of these retailers should contact Russ Forte at 1-202-447-5505. He can provide you with names, addresses and telephone numbers.

We not only want more people to get our information electronically, we want to know how our computerized information service can be improved. We're always looking for suggestions.

Sincerely,

Ann Collins Chadwick

ANN COLLINS CHADWICK, Director
Office of the Consumer Advisor
Phone: (1-202) 382-9681

CONTENTS



Consumer Education

Real men are doing more than eating quiche these days. Many will be preparing holiday meals.

Our Hotline home economists offer help with hand-to-hand turkey "combat" p. 4

Food Safety

Tie Up Those Mail-Order Foods With Safe Packing & Delivery

It's easy and fun to buy by mail when you know how to ensure safe delivery. Read actual "heartbreaker" accounts of what happened to some of the unwary p. 6

Special Feature



*EXCLUSIVE — The *First* Food Safety Game!

What kind of monopoly do you have on the latest food safety information? Answers from USDA experts p. 8

Health and Nutrition

Gifts of Research

From carbonated milk drinks to the latest findings on how copper deficiency can affect the heart, USDA research works to improve human health and food production p. 10

Turkey Basics Chart from USDA p. 14

News Wires

USDA will fight salmonella with a new sanitizing chlorine spray in poultry plants and improved labeling of how to handle poultry products at home p. 12

New quick tests for chloramphenicol, sulfamethazine will help keep unwanted drug residues out of meat foods p. 12

Government, the food industry and academia are represented on the Advisory Committee on Microbiological Criteria for Foods p. 13

The new sandwich bread? Pass a slice of cornbread, please p. 13

Snip-Its

You've been asking for it, so here it is — a handy filler and tips section geared to safe-food kitchen gifts, the "egg" questions and new, free publications p. 15



Consumer Education

With *ESQUIRE* running a cooking column and *GQ* (*GENTLEMAN'S QUARTERLY*) using its letters section to discuss imported coffees, we can definitely say that magazine editors at least think men are showing a new interest in cooking.

Could it be that a few good men will actually be *preparing* holiday meals this year?

"Probably," says USDA's Yves Gerem, our regional public affairs person in Dallas, who recently conducted a telephone survey on why more men are venturing into the kitchen.

Gerem reports that Susan Wyler, food editor of *FOOD & WINE* magazine in New York, says, "More men are cooking now because more couples are working. Also many men dine out on expense accounts, so they go home and try to reproduce what they liked in the restaurant."

And Cynthia Fauser, food and nutrition specialist with USDA's Extension Service in St. Louis, comments, "Men like sciences and cooking is something akin to that. They like the creativity in cooking and it's an activity with immediate feedback."

Jean Liles, food editor of *SOUTHERN LIVING*, told Gerem that many men help with Thanksgiving dinner. "Of course in the South," she adds, "men always enjoyed cooking out, especially grilling. And you'd be surprised how many men like to make desserts."

Liles also mentions that there are more single men today and that the expense of eating out pushes many hold-outs into the kitchen.

Arlene Coco, a cooking teacher at Bloomingdale's in Dallas who gives classes for bachelors, notes that since "more men have to share kitchen duties, they'd rather cook than wash-up."

What does Ms. Coco emphasize in Bachelor Cooking 101? "They're inter-

ested in quick-cooking, so I teach them how to use packaged products and mixes with fresh ingredients for good, easy meals."

Cooking is interesting, fascinating actually. But it can also be perplexing when you're still scoping the whole thing out.

To help with the questions men and other new cooks face when they square off with a holiday meal here is some down-to-the-cutting-board advice from USDA's Meat and Poultry Hotline home economists.

Q. I'll be hosting the office singles Thanksgiving dinner, but I don't know the first thing about party planning.

If I bring a stuffed, cooked turkey and trimmings home from the deli on Wednesday, refrigerate it overnight and reheat it on Thursday, will that be okay?

A. It's not the safest plan. A cooked, stuffed turkey is too big and dense to cool down quickly enough in a home refrigerator to prevent bacterial growth. Plus, later re-heating the turkey in a slow oven to prevent drying-out could allow even more growth of potential food poisoners.

Bring the turkey home from the deli on Thursday and serve your guests immediately. Otherwise, if you must buy it the day before, remove the stuffing and meat from the bird to refrigerate in several small containers. Reheat these goodies, in small pans, in the microwave or oven. Make sure re-heated meat and stuffing reaches 160° F. Bring gravy to a rolling boil.

REAL MEN ARE IN THE KITCHEN FACING REAL TURKEYS



And Other Things That Could Frazzle Julia Child



Q. When I promised to smoke this year's turkey on the grill, it didn't sound too hard. But now I have to do it next week. How exactly do you smoke a turkey? Will cold outside temperatures interfere?

A. How you smoke a turkey depends in part on your equipment, but here's some general advice.

High-quality charcoal will get you off to a fast start. Use the damper for the slow, sustained cooking you'll need toward the end of the process.

Want to cut your clean-up time? Foil-line the grill and place a foil drip-pan beneath the meat rack.

To maintain a safe cooking temperature of about 250° F, add new coals every hour. Check the air temperature by propping a "stabbing" meat thermometer up in an opening on top of the grill.

How long will it take to smoke the turkey? Indoors, you can estimate 15-18 minutes per pound for thorough cooking; outside, strong winds can extend that. There's a fail-safe check, though. You know the turkey's done when it registers 180° F on a meat thermometer inserted into the thigh.

Q. I'm giving a party and since I don't cook much, I'm picking up deli trays of meats and cheeses. How can I keep them safe for my guests?

A. Try this: Ask the deli manager for several small platters instead of 2-3 large ones. That way, you can keep half your trays refrigerated while the others are out on the buffet. Of course no tray should sit out at room temperature over 2 hours. Not only is the replacement-tray method safe, but your late-arriving guests can enjoy the same appetizing arrangements as the early arrivals.

Q. Last year I saw fresh turkeys in the store a full three weeks before Thanksgiving. How soon should you buy one?

A. The official USDA word on this is that fresh turkey, highly perishable, should be bought no more than a day or two before you're ready to cook it. If, for some reason, you must shop more in advance than that, you might be better advised to buy a frozen turkey.

Q. I keep reading that a turkey should only be thawed in the refrigerator, but I really don't have room, this time of year, for a turkey to sit in there several days. What are my other options?

A. You can thaw a small turkey in the microwave. Follow the manual carefully and be ready to cook the bird as soon as it's thawed.

You can also thaw turkey in a sink. After cleaning the sink, put the turkey in a heavy freezer bag secured with a twist tie. Cover the bird with cold water, changing the cold water every 30 minutes. Depending on the size of your turkey, this will take from 4 to 12 hours.

Q. Whenever we prepare a big meal, my wife uses two cutting boards. One is for the meat, and the other is for other foods. Why?

A. While taking pains is often extra work, it pays safety dividends. Because juices and fragments of raw meat and poultry can carry food poisoning bacteria to other food, your wife just eliminates the possibility of contamination by using two boards.

We'll add a further caveat: in wooden cutting boards, bacteria can get down into grooves where ordinary washing may not remove them. So we recommend you use an acrylic board. Wash your acrylic board in hot, soapy water between uses.

Q. What troubles me most about a big holiday feast is the timing. It's all I can do to get the turkey ready. I'll never manage to get gravy hot, cranberry salad cold and dessert ready at the same time. Help!

A. Timing is a bugaboo for most new cooks. May we suggest you just do the turkey and perhaps your favorite stuffing. Get some bread from a fancy baker and heat it, last minute, in the microwave. Order a cold relish tray from the grocery. Ask one of your guests to bring the cranberry salad. Someone else supplies dessert. People like to show off favorite recipes and no one will feel frantic.

— Staff writers Yves Gerem, Jene Springrose and Susan Templin contributed to this story.

TIE UP THOSE MAIL-ORDER FOODS



WITH SAFE PACKAGING AND DELIVERY

by Mary Ann Parmley

Often now the season to be jolly is a time to get a lot of upper arm exercise hauling massive catalogues in through the mail-slot.

And with mail-order foods bringing in close to \$1 billion a year, it's not surprising that the crown rib roasts, succulent baked turkeys and gorgeous planked salmon you see in the catalogues look fabulous.

Doubtless most of these items are just as good as they look when shot by the food photographers. They're also great for putting together easy holiday meals and as gifts for those on your shopping list.

Still, the food safety question is how can you be sure these foods will stay safe and wonderful in shipment?

Diane Van, a USDA Meat and Poultry Hotline staffer who's researching the problem, says, "We've been logging calls on problems with mail-order foods for the last two years, and what we're seeing is that, as their popularity grows, so does the trouble people have with them."

"Specifically," says Van, "we're seeing a marked increase in situations where the consumer receives a product in questionable or downright unsafe condition."

"What concerns us even more," says Hotline manager Susan Templin, "is that we have reason to believe the complaints we hear are just a fraction of the real problem. People don't like to complain about gifts, right? They don't want to hurt anyone's feelings. Plus, they didn't pay for the item, so if they have to throw it out, it's not that big a loss."

Exactly what kinds of mail-order food problems reached USDA's Meat and Poultry Hotline (1-800-535-4555) over the last holiday season?

"Most of the calls," says Templin, "were on smoked or smoked and vacuum-packed hams and turkeys. A runner-up group included sausage, pheasant, salmon, cheese and cheesecake. Usually the problem was items no longer frozen or cold. Cheeses were reported 'runny,' Cheesecakes were 'mushy,' and one smoked salmon was covered with mold."

USDA food technologist Robert Post, called in to consult on the issue, says, "It's important that people understand that just because a meat's been smoked — which often is just exposure to a commercial smoke source — doesn't necessarily mean it's been cooked. Plus, cooked meat should be shipped with an ice source to keep it at refrigeration temperatures — at or below 40° F."

Post continues, "And while a vacuum-pack does extend shelf-life somewhat and delay some taste-change problems, most vacuum-packed foods still need a cold source."

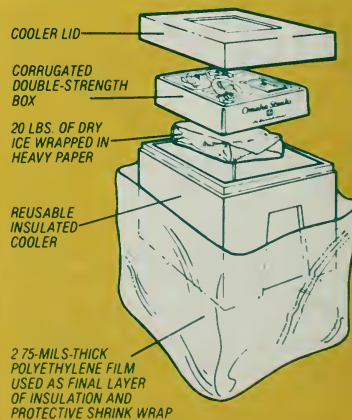
What is an adequate cold source? "Omaha steaks, a pioneer in the field," says Post, "uses a box which consists of a styrofoam cooler packed with dry ice." (See illus.)

"Other reliable companies," Post continues, "freeze food solid so that overnight delivery in cold weather guarantees that it will arrive still firm and cold to the touch."

Hint: Don't Send Food to Someone's Office. "One thing I know from this research," says Hotline staffer Diane Van, "is that it's nearly always unwise to send a food gift to someone's office."

Van is grinning. "You wouldn't believe some of these 'office' stories. A salesman's wife called. Husband got a box of frozen steaks at the office. He put them in the car, forgot about them and drove his usual route for a week before he brought them home. They were filet mignons too. Naturally, we had to tell her not to use them."

"MINIATURE DEEP FREEZE" PACKAGING



© 1987 Omaha Steaks International, Inc.

Omaha Steak's meat packaging involves dry ice inside a styrofoam cooler, the whole package shrink-wrapped for extra insulation.

"Then," Van continues, "there was the executive who got a baked turkey in an unmarked box during the office party. She didn't know what it was. Put it under her desk. Forgot it till the weekend. Another food gift lost!"

It's safer to send food directly to the home. Even then, though, things can go wrong. People are out of town and the neighbor doesn't refrigerate something. No one's home and something that must be signed for spoils at the Post Office.

Still, most of these problems can be solved by thinking ahead.

Tips on Mail-Order Food

... When You Order A Gift

1. Check on the cold source — Ask what kind of cold source will be used with perishable food and how long the package will be in transit. The cold source must last long enough so that food arrives still frozen or firm and cold.

Canned or processed foods labeled "keep refrigerated" should also be shipped with a cold source.

2. Check that the package will be labeled as perishable food *on the outside*. Perishables have a much better chance of surviving if properly labeled.

3. Set a workable delivery date. Once you know how long the mailing takes, call your friends to find a date someone can be home to receive the gift. Is there a neighbor who's usually home? Mention that this "surprise" should go straight into the refrigerator. Then call the mail-order house back and set up delivery.

... When You Receive A Gift

1. Fresh or cooked meat, poultry or fish should arrive frozen or still hard in the middle. If never frozen, it should be cold to the touch.

2. Ham — With the exception of dry-cured country hams, baked hams and most canned hams need refrigeration and should arrive cold.

Storing Mail-Order Meat & Poultry

	Cabinet	Refrigerator	Freezer
Smoked Turkey		7 days	6 mos.
Wild Smoked Turkey		1-2 days	6 mos.
Game Birds		1-2 days	6 mos.
Country Ham — dry-cured	unsliced, several mos.	sliced, 1-2 mos.	
Canned Smoked Hams	unopened, 1 yr.	opened, 1 week	
Canned Smoked Refrigerator Hams		unopened, 6-9 mos. open, 1 week	
Lamb		1-2 days	6-9 mos.
Beef		1-2 days	6-12 mos.
Pork		1-2 days	4-8 mos.

3. Sausage — Some hard, dry sausages (pepperoni, hard salamis) don't need refrigeration; other types (summer sausage, Lebanon bologna, Thuringer) do. If the label says "refrigerate," the sausage should arrive cold.

4. Caviar & Lobster — Fresh caviar must arrive carefully packed and thoroughly cold. Otherwise don't eat it. Don't even taste it. Canned caviar ordinarily only requires refrigeration after opening.

First-class live lobster comes packed in seaweed in insulated boxes. Experts say the lobsters should still be lively before cooking. After cooking, check that the tail is still tightly coiled. Don't eat cooked lobster with a limp tail.

5. Cheese — There should be no mold on cheese except what is part of its nature — blue mold in blue cheese, for example.

6. Cheesecake, perishable because of its ingredients, should arrive fully frozen.

PROBLEMS???

Call USDA's Meat and Poultry Hotline (1-800-535-4555) with questions on mail-order meat and poultry.

Report problems with other food items to the Food and Drug Administration. Look for the nearest office under the U.S. Government, Dept. of Health and Human Services listings in the phone book.

If you think you deserve a refund, call or write the mail-order house directly. But remember, it's the shipper's responsibility to deliver on time; the customer's responsibility to have someone at home to receive goods.

Should you suspect fraud, check the phone book for:

- The Inspection Service of your local U.S. Postal Service, or call
- the Mail Order Action Line of the Direct Marketing Association
6 E. 43rd Street
New York, N.Y. 10017
(1-212-689-4977)

As a last resort, write the publication that carried the ad. No publisher wants fraudulent ads.



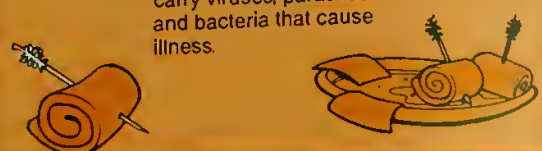
START

1 You like to try the newest fads, but you're not going to try sushi and steak tartare because

a. You should never eat anything you can't pronounce.

b. Raw meat and fish can unbalance your protein intake.

c. Raw meat and fish can carry viruses, parasites and bacteria that cause illness.

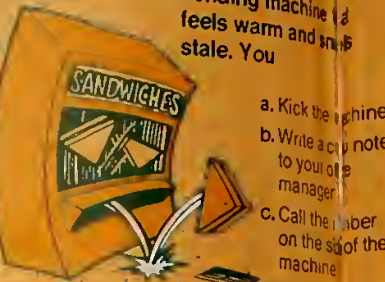


2 Working late over Christmas, you get a tuna sandwich from the vending machine. It feels warm and stale. You

a. Kick the machine.

b. Write a note to your manager.

c. Call the number on the side of the machine.




3 The best way to avoid salmonella infection is to keep a clean kitchen, cook foods thoroughly, refrigerate them carefully and

a. Don't smoke in the kitchen.

b. Keep parakeets out of the kitchen.

c. Keep food that's cooling or won't be cooked from contact with raw meat, poultry or their juices.




4 The safest way to thaw a beef roast or turkey is

a. In the refrigerator.

b. On the kitchen counter.

c. In your mother-in-law's dishwasher.



The NEW **F O O D**

Safety Game

What's Your Gut Reaction to these Food Safety Questions?

Experts Say

- STAPHYLOCOCCUS
- SALMONELLA
- CAMPYLOBACTER

is probably the most common cause of diarrheal-type food poisoning today.



TRUE or FALSE:

There are no bacteria or other micro-organisms on meat and poultry you buy at the grocery.



You say you've played Trivial Pursuit. You've even put your Scruples to the test. Now it's time to test your food safety knowledge.

Starting at the arrow above try your hand at the questions around the game board! Answers are on the right. No peeking.

9 The new vacuum-packaged meat in your supermarket is maroon. You

a. Send it back and ask for a designer color.

b. Write the company that their meat isn't fit to eat.

c. Realize the color is due to a lack of oxygen in the package and that the meat will turn red again when air hits it.

8 An ice storm knocks out the electricity, and the TV news people estimate it'll be at least 8 hours before it comes back on. You can do two constructive things to save the freezer-full of meat you bought with last year's bonus.

a. Fill the freezer with dry ice or keep the door closed at least, so cold air can't escape.

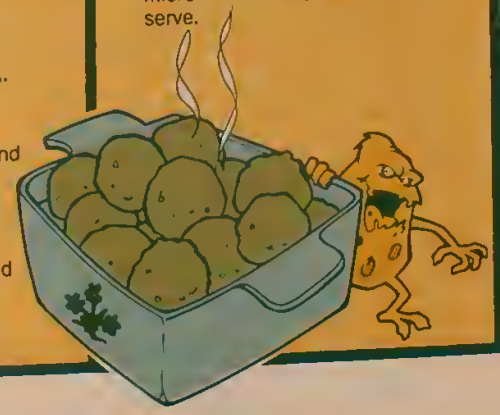
b. Cook all the meat and put it back in the freezer. Once meat's been cooked, it will keep indefinitely.

7 The term "sous vide" refers to

a. The French version of "This is Your Life."

b. A specialty saucepan for cooking liver and kidneys.

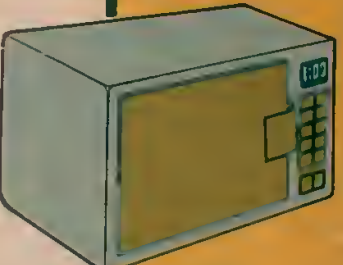
c. A new packaging process in which raw food is put in a plastic pouch and cooked for later reheating.



5 The reason that foods cooked in a microwave oven need "standing time" is

a. They reach ultra-hot temperatures and must cool down for serving.

b. Foods finish cooking after they're removed from the oven.



6 PARTY PANIC: You can't find the sterno-can that goes under the chafing dish you need for the meatballs. A candle you sawed in half is just burning what's above it. You

a. Make peanut butter sandwiches.

b. Serve the meatballs at room temperature.

c. Refrigerate the meatballs. Then, at several points in the evening, microwave small portions to serve.

10 F. Bacteria and other microbes are so widespread in nature, it's nearly impossible to produce meat-food products without some trace of them. That's why careful refrigeration and thorough cooking are so important.

11 A. A relative newcomer not often diagnosed or reported, campylobacter may be the leading cause of foodborne illness today. To avoid it, never drink untreated water on a camping trip or raw milk. Don't eat meat, poultry and fish that isn't cooked well. This will reduce your chances of getting campylobacter with its severe diarrhea, cramps, fever and headache that normally last 2-7 days.

SCORING:
 Correct Answers
 9-11 Microbes beware
 5-8 Eat, drink & be merry
 0-4 Make a New Year's Resolution to learn more about food safety
 *See list of free brochures

Writers—Linda Russell, Mary Ann Parmley

5 b. Through, safe cooking—which you should check with a meat thermometer or microwave probe—means that red meat comes to 160° F, poultry to 180° F. Microwave recipes allow standing time to complete thorough cooking.

8 a, c. Answer "c" is the correct because it follows the 2-hour rule—never leave perishable food at room temperature over 2 hours. Food poisoning bacteria multiply quickly at room temperature.

7, c. A big hit in the restaurant trade, sous-vide packaging may soon reach the cold case and deli counter in supermarkets. REMEMBER, vacuum-packed, cooked food must be as carefully refrigerated and reheated as other perishable food.

6 a, b. If you can't go out in a storm for dry ice, just keep the door shut. A full freezer will keep things frozen about 2 days, a half-full freezer, roughly 1 day. Cooked meats should never be off refrigeration over 2 hours and this freezer is off!

9 c. Maroon is the designer color in the new vacuum-packaged meats. The bright red "bloom" returns when you open the package to air.

And the Answer is:

1 c. Raw foods haven't been cooked and still have all the infective agents that may have attacked the cow or pig during its life. By the way, many steak tartare recipes also call for raw egg.

2 c. The vendor must supply cold perishable food (like your sandwich) and/or HOT hot foods if they don't fix the machine, call the health department. Toss the sandwich and post an "out-of-order" sign.

3 c. Scrub your hands, utensils, plates, cutting board and counters all contact with raw meat, poultry or their juices to keep bacteria out of other foods. For optimum safety, it's best to keep pets, with the many other things they can spread, and cigarettes, which mean you keep touching your mouth with food-preparing hands, out of the kitchen too.

4 a. Thaw in the refrigerator or microwave. Thawing on the kitchen counter means disease-causing bacteria can grow in warm outer layers while the inner portions are still thawing.

Health and Nutrition

Gifts of Research

by Liz Lapping and Marjorie Davidson

Scientific research can be a tedious and lengthy task. While an occasional discovery may rate headlines and media coverage, scientists in basic research may labor for years without startling results.

Still, scientists at U.S. Department of Agriculture laboratories across the country work constantly to improve the quality of our lives through better agriculture, nutrition research, new food products and more.

Here, in time for the holiday season, is a listing of just a few of these "gifts of research" for the consumer.

Salt-Free Cake

People on a low-salt diet can now take heart that their sweet tooth does not have to be denied as well. Taste panels at USDA's Eastern Research Center in Philadelphia have determined that the flavor of salt-free cakes — white, yellow, spice and devil's food — is as good or better than the typical bakery cake, which may contain as much as half a teaspoon of salt.

USDA researchers have found that by altering the order in which they mix ingredients and, at times, by changing the type of sugar used, commercial bakers can avoid the shrinkage and lack of firmness that were prior pitfalls in baking low-salt or no-salt cakes.

Contact: **Dr. Virginia Holsinger**
1-215-233-6703

Several Small Meals vs. a Couple of Large Ones — the Calories are Still the Same

A resounding "no" has been pronounced on recent dietary advice that recommends eating several small meals each day for faster weight loss.

Researchers at USDA's Western Human Nutrition Research Center in San Francisco found that it made no difference if volunteers ate two large meals or ate the same amount of food at several smaller meals. The rate at which their bodies used the calories remained the same.

So, while eating smaller meals may have some psychological benefits for dieters, the old-fashioned dietary wisdom remains the same — it's not how you eat your food that makes the difference, it's that you eat less of it!

Contact: **Dr. James M. Iacono**
1-415-556-9697

Copper Deficiency Linked to Heart Disease and Hypertension

Studies conducted at the USDA Human Nutrition Research Center in Grand Forks, N. Dak., suggest a link between mild copper deficiency and hypertension and heart disease.

When lab animals were severely deprived of dietary copper, the animals developed abnormal electrocardiograms, elevated blood cholesterol and other symptoms that are widely believed to increase the risk of heart problems.

Recent estimates indicate that only 25 percent of the U.S. population consumes the two milligrams of copper per day considered adequate by the Food and Nutrition Board of the National Academy of Sciences. Most diets in the United States provide about half that amount.

"It should be possible to avoid copper deficiency without relying on mineral supplements. And careful menu planning with a wide variety of foods may allow diets to have ample copper without excluding any particular food," says research physician Dr. Leslie M. Klevay.

Some copper-rich foods are liver, oysters, chickpeas, nuts and seeds.

Investigator Dr. Henry Lukaski mentions research which shows that "a mild copper deficiency can raise blood pressure when the body is stressed. During a hand-grip test, eight healthy young women who got only 0.6 to 0.7 mg. of copper daily for 3 months had greater than normal increases in both systolic and diastolic pressures, with substantial increases in diastolic pressure."

Still, there was no change in blood pressure while the women were at rest, nor did the low copper intake affect heart rate.

Contact: **Dr. Henry Lukaski**
Dr. Leslie M. Klevay
1-701-795-8429

New Variety of Iceberg Lettuce

Autumn gold, a new iceberg lettuce that resists the mosaic virus, may be on the market within a year. The lettuce is designed for November and December harvests in California and Arizona desert regions where much of the nation's winter lettuce crop is produced.

Resistance to mosaic virus is important because mosaic-infected lettuce is worthless. Infected plants form small, distorted heads with leaves that have an unhealthy "mosaic" pattern of dark and light green.

Another Autumn Gold advantage is that it withstands heat, so the lettuce doesn't go to seed too early. Lettuce that has gone to seed cannot be sold, and that costs growers money.

"The new lettuce should appeal to consumers too" says Dr. Edward J. Ryder, of USDA's Agricultural Research Service in Salinas, Cal., who developed the variety. "It has nicely formed, well-rounded heads that make it better looking" than many iceberg varieties grown in the West for the late fall or early winter harvest.

Contact: **Dr. Edward J. Ryder**
1-408-755-2860

Carbonated Milk — The New Soft Drink

Imagine a nutritious alternative to soft drinks. Scientists at USDA's Agricultural Research Center in New Orleans, La., have brought milk into the 20th century. They've carbonated it.

The soda milk is made by bubbling carbon dioxide gas through a mixture of water, nonfat dry milk, juice or flavoring, and other ingredients. The mixture is kept under pressure and bottled right away so the carbonation doesn't escape.

Scientists have produced two types of this carbonated milk — one mixed with filtered apricot juice, the other with artificial strawberry flavoring.

"You get that tingling, refreshing sensation of carbonation that you get in soft drinks, and you're also getting calcium, protein, and Vitamin C from the milk and juice," says food technologist Dr. Ranjit S. Kadan.

Aside from its nutritional advantages, carbonated milk would also spur consumption of milk. "Carbonated milk would be a big help for children, who need calcium as their bones develop," says Kadan.

Commercial companies are interested in making such drinks, which would contain calcium and protein, and create a new market for surplus nonfat dry milk.

Contact: **Dr. Ranjit S. Kadan**
1-504-286-4332

Peanut Variety Helps in War Against Cholesterol

A peanut strain planted more than 30 years ago can now help lower cholesterol levels. The variety has mutated to produce an oil that is effective in lowering blood cholesterol levels in humans, reducing fat content in meat and giving peanut products a longer shelf life.

"Between 1977 and 1981 this variety became much higher in oleic acid. This produces an oil higher in mono-unsaturates that may be more effective than poly-unsaturates in lowering serum cholesterol," says Dr. David Knauff with the Institute of Food and Agricultural Sciences at the University of Florida in Gainesville.

Recent studies at Texas A&M University have also shown that oil high in mono-unsaturates has the potential to reduce the proportion of saturated fat in meat. For instance, in swine that were fed a ration containing mono-unsaturated oil, the proportion of saturated fat in the pork was reduced from 40 percent to 15 percent, he said.

The peanut also should increase shelf life of peanut products. The high levels of mono-unsaturated fats in the new variety are more stable, preventing rancidity in peanut butter and candies.

The new variety is currently being cross-bred with established varieties for commercial plantings. Success may be only two to three years away.

Contact: **Dr. David Knauff**
1-904-392-1811



Putting Salmonella On Hold

Control of salmonella at home can be as easy as reading and following directions for safe handling, storage and cooking of foods. USDA's Food Safety and Inspection Service (FSIS) is working to make it even easier to know what those directions are.

FSIS and the National Broiler Council, a poultry trade group, are encouraging poultry processors to participate in a voluntary labeling program that will urge consumers to:

- Keep all uncooked meats refrigerated or frozen until cooking — thaw in refrigerator or microwave;
- Cook the product thoroughly to an internal temperature of 180° F; and,
- Wash preparation surfaces and utensils after contact with uncooked meats.

Poultry processors may also include their name and address on the label as a source for additional cooking and handling information.

FSIS is working in other areas to "step on the salmonella bug," too. Since last June, FSIS has required that equipment used to slaughter poultry be sprayed with a chlorine solution of 20 parts per million (ppm). At such low levels, chlorine doesn't affect the taste of the meat.

If equipment is not properly cleaned, a chicken or turkey moving down the processing line can leave behind bacteria on the equipment that is picked up by the next bird. Spraying this equipment with the chlorine solution drastically reduces bacteria, including salmonella. Chlorine must be used on all automatic equipment that removes the insides of chickens and turkeys, as well as in the water used to wash the birds.

Controlling salmonella is a shared responsibility. Improvements such as the chlorine spray help ensure that the poultry you buy is safe and wholesome. Better labeling information helps you, the consumer, ensure the poultry you prepare at home is handled, stored and cooked properly. Together, we can put salmonella on hold permanently.

— Linda Swacina

New Quick Tests for Drug Residues

Animal drugs are important in keeping livestock healthy, but they certainly don't belong in the food supply. That's why the Food Safety and Inspection Service (FSIS) is always "on the lookout" for new and better ways to quickly detect illegal levels of drug residues.

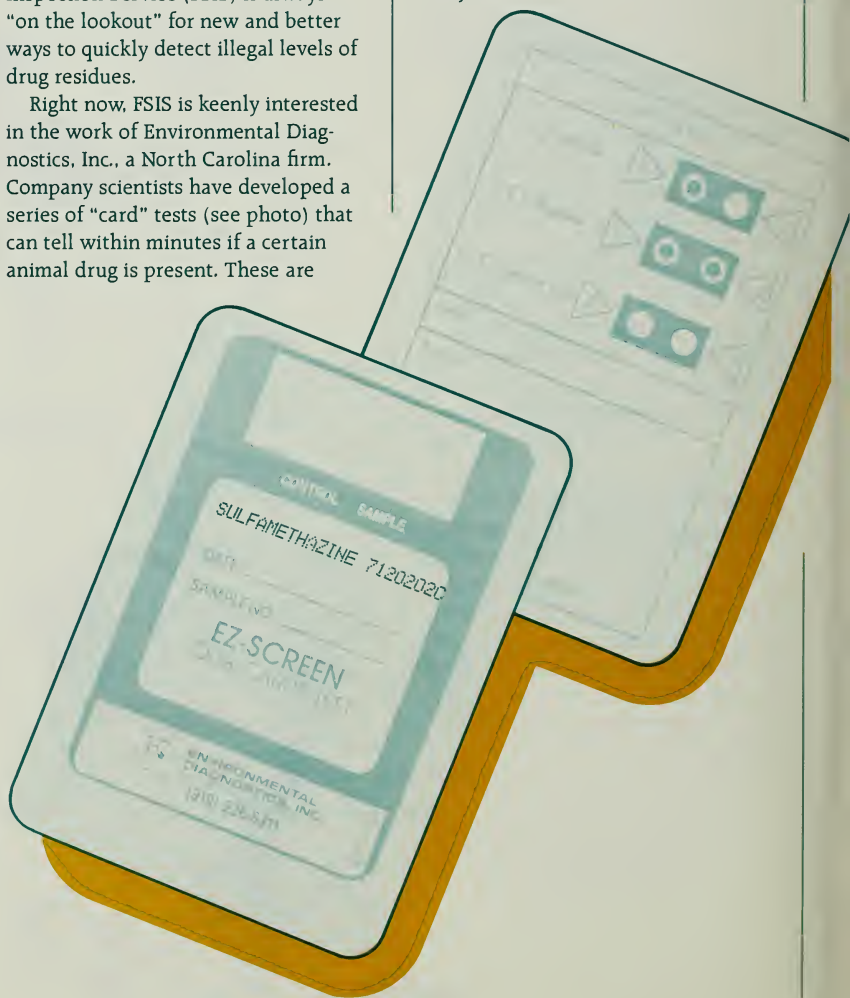
Right now, FSIS is keenly interested in the work of Environmental Diagnostics, Inc., a North Carolina firm. Company scientists have developed a series of "card" tests (see photo) that can tell within minutes if a certain animal drug is present. These are

screening tests only — they do not tell exactly how much of a drug is present — only that it *is* there.

The tests are simple to run, taking only 10 minutes. The test is positive when the control dot darkens while the sample dot stays white.

They are also inexpensive, running about \$5 per test. They can be used in a laboratory or by a food inspector right in a meat plant for immediate results. The cards are small, for ease of handling — about the size of a credit card.

Quick screening tests such as these are a boon to the agency since they reduce the need for more elaborate, and expensive, testing. Only samples that are positive after screening need to be sent to a laboratory for further analysis.



Right now, the agency is looking into two of these tests. One is for chloramphenicol, an antibiotic that is banned for use in livestock since it can cause aplastic anemia — a potentially fatal blood condition — in people. Unfortunately, there have been cases of illegal use of the drug since it was banned, so the test is needed.

The second test is for sulfamethazine. It is permitted for use in livestock, but it can't be given in the 15 days before slaughter. This allows time for the drug to clear the animal's system. While sulfa residues generally have decreased in the last decade, sulfamethazine made headlines recently when preliminary results from a study by the Food and Drug Administration suggested the drug may cause cancer in mice.

For more information on "card" tests, contact Bernard Schwab, chief, Medical Microbiology Branch, Microbiology Division, Food Safety and Inspection Service, 1-301-344-1813.

— Danielle Schor

Committee Formed to Advise on Microbiological Hazards in Foods

Food inspection is changing rapidly these days. How so?

Scientists are continually finding new sources of foodborne illness like bacteria, viruses and parasites that can only be identified with lab tests. This means that traditional visual inspection by meat inspectors is less protective than previously thought.

There is also a growing awareness of foodborne illness associated with seafood.

Then there's the continuing demand for quick and ready-to-eat foods, many in new packages consumers don't know how to safely handle.

To confront this situation, the federal agencies that regulate food are joining together to plan a unified course of action. This group includes the U.S. Department of Agriculture (meat and poultry inspection), FDA (other foods), Commerce and the Department of the Army.

They've formed the National Advisory Committee on Microbiological Criteria for Foods. The committee consists of 19 members representing government, academic, food industry and consumer interests.

The committee's function will be to advise on steps that can be taken to assure the safety of various food products. This advice may range from comments on formal regulations and purchase requirements for bulk feeding programs to assistance with voluntary guidelines designed to elicit industry support.

To begin operations, the committee has set up two working groups — one on meat and poultry and one on seafood.

For further information, contact: Ms. Catherine DeRoeper, coordinator, 1-202-447-3002.

— Richard Bryant

How About A Zesty Cornbread Sandwich?

Soon you may be able to make sandwiches using cornbread. Cornbread has been around since colonial days as a tasty, but crumbly accompaniment to ham and beans. But now, thanks to scientific research from the U.S. Department of Agriculture, cornbread could take on the smooth, uniform texture of a popular new sandwich bread.

"A new specialty bread from USDA contains fine-ground corn flour blended with wheat bread flour," says food technologist Kathleen A. Warner of the Agricultural Research Service in Peoria, Ill.

The bread's delicate corn flavor and rich golden color set it apart from conventional white and whole wheat breads. Its texture resembles that of some popular, coarse-textured breads rather than conventional white breads.

"It really enhances the taste of a sandwich with turkey, swiss cheese and alfalfa sprouts," says Warner. She rates corn-flour bread a "nine" on a scale of one to ten. "I liked it more because of the subtle corn flavor"

"Market niches for this bread are more likely in specialty bake shops, delis and restaurants than in supermarkets," she says. Perhaps someday pre-mixes may become available for home baking.

Contact: Kathleen Warner
1-309-685-4011.

— Liz Lapping



**"HIP,
HIP, HOORAY!"**

*Longer hours to
serve you better
on the
Meat and Poultry
Hotline.*

*Call 1-800-535-4555
for food safety advice.*

*Monday - Friday, Nov. 1-30, 9 to 5, EST
Saturday - Sunday, Nov. 19-20, 9 to 5, EST
Thanksgiving Day, Nov. 24, 8 to 2, EST*

*Monday - Friday, Year-round, 10 to 4,
Eastern Time*

*A public service of this publication
and the U.S. Department of Agriculture*



TURKEY BASICS FROM USDA

BUYING A TURKEY

FROZEN	FROZEN PRE-STUFFED	FRESH	PRE-COOKED
Buy any time but keep frozen until 1-4 days before cooking. (See THAW)	Buy any time. Keep frozen until ready to cook. DO NOT THAW.	Buy 1-2 days before cooking. DO NOT BUY PRE-STUFFED.	Serve immediately within 1-2 hours of removal from oven.
1-1/2 lbs. per person	1-1/4 lbs. per person	1-1/2 lbs. per person	1-1/4 lbs. per person

THAWING A TURKEY (For frozen, unstuffed turkeys only)

THAWING TIME IN THE REFRIGERATOR	THAWING TIME IN COLD WATER	THAWING IN A MICROWAVE
(Whole Turkey) 8 to 12 pounds.....1 to 2 days 12 to 16 pounds.....2 to 3 days 16 to 20 pounds.....3 to 4 days 20 to 24 pounds.....4 to 5 days	(Whole Turkey) 8 to 12 pounds.....4 to 6 hours 12 to 16 pounds.....6 to 9 hours 16 to 20 pounds.....9 to 11 hours 20 to 24 pounds.....11 to 12 hours	Check manufacturer's instruction for the size turkey that will fit in your oven, the minutes per pound, and the power level to use for thawing.

After thawing, remove neck and giblets, wash turkey inside and outside with cold water, drain well.

WASH HANDS, UTENSILS, SINK, AND ANYTHING ELSE THAT HAS COME IN CONTACT WITH RAW TURKEY.

STUFFING A TURKEY

STUFFING IN THE TURKEY	STUFFING SEPARATE
Mix and stuff ingredients immediately before putting in oven. Stuff lightly. Cooking time takes longer. Allow 3/4 cup stuffing per lb./turkey.	If you are in a hurry, bake stuffing in greased, covered casserole during last hour while turkey roasts.

ROASTING A TURKEY

Timetable for Roasting Fresh or Thawed Turkey in a 325°F Oven

WEIGHT (pounds)	UNSTUFFED (hours)	STUFFED (hours)
4 to 6 (breasts)	1-1/2 to 2-1/4	Not applicable
6 to 8	2-1/4 to 3-1/4	3 to 3-1/2
8 to 12	3 to 4	3-1/2 to 4-1/2
12 to 16	3-1/2 to 4-1/2	4-1/2 to 5-1/2
16 to 20	4 to 5	5-1/2 to 6-1/2
20 to 24	4-1/2 to 5-1/2	6-1/2 to 7
24 to 28	5 to 6-1/2	7 to 8-1/2

Place turkey breast-side up on a rack in a shallow roasting pan. Do not add water. Cover turkey with loose tent of heavy-duty aluminum foil. Remove foil 20-30 minutes before roasting is done.

AS SOON AS TURKEY IS DONE, REMOVE ALL STUFFING. SERVE TURKEY QUICKLY WHILE IT IS HOT.

STORING YOUR LEFTOVERS

Divide leftovers into small portions and store in several small or shallow containers. Turkey will keep 3-4 days in refrigerator. Use stuffing and gravy within 1-2 days. Bring gravy to rolling boil before serving. Use frozen turkey, gravy, and stuffing within one month.

OTHER QUESTIONS ON YOUR HOLIDAY TURKEY?

If you have questions about your Holiday Turkey, call the USDA Meat and Poultry Hotline at **1-800-535-4555**.

HOURS: Monday–Friday, Nov. 1-30, 9 to 5, EST Thanksgiving Day, Nov. 24, 8 to 2, EST
Saturday–Sunday, Nov. 19-20, 9 to 5, EST Monday–Friday, Year-round, 10 to 4, EST



Safe & Merry Kitchen Gifts

- An acrylic cutting board — knives won't leave grooves in it where bacteria from fresh meats and their juices can hide, so it's much easier to keep this kind of board safe from use to use.
- A meat thermometer — Use it to ensure holiday meats reach a safe, high cooking temperature (180-185° F for poultry, 160° F for red meat). Inserting the thermometer so it doesn't touch fat or bone will give you an accurate reading.
- A chafing dish — what peace of mind for a frequent party-giver! Just make sure the dish holds buffet food at 140° F or above, and never leave food in it over 2 hours.

Holidays and Food Allergies Don't Mix

Many holiday foods contain milk, eggs, corn or wheat — ingredients that can cause some people to have allergic reactions.

But don't let food allergies spoil your holiday. With USDA's new publication, *Cooking for People with Food Allergies*, you can learn to prepare holiday goodies without these ingredients.

To get your copy, send \$1.50 to the U.S. Government Printing Office, Washington, D.C. 20402.

Egg Alert

While homemade eggnog and chocolate mousse are holiday delights, experts advise against serving these or any other foods containing raw or only partially-cooked eggs to high-risk individuals — infants, the elderly and chronically ill.

Experts made this recommendation after completing a study that showed a link between Grade-A eggs and salmonella bacteria that cause food poisoning.

The study was conducted by Dr. Michael E. St. Louis, an epidemiologist with the Centers for Disease Control, and other scientists and health experts. It found that Grade-A eggs, or foods containing such eggs, caused 1/3 of the salmonella outbreaks in the nation's Northeast between January 1985 and May 1987. Note: Nearly all these cases involved *mis-handled* eggs.

Safe Egg Care

Home economists with USDA's Meat and Poultry Hotline recommend the following tips to keep eggs safe:

- Keep eggs refrigerated.
- Use clean eggs with intact shells.
- Make sure your hands are clean when handling eggs.
- Cook eggs thoroughly. There may be some risk in eating lightly cooked eggs or lightly cooked foods containing eggs, such as soft custards. The risk is greater if eggs are eaten raw or if raw eggs are mixed into food that's not cooked further.

That's a Lotta Cookies!

Got caught with your hand in the cookie jar? You're not alone. On the average, each American eats more than 300 cookies a year. Together, we consume more than 2 billion pounds of cookies per year.

For more cookie data and other diet insights, see the "Diet and Nutrition Letter," Tufts University, February 1988.

Older People Snack Smarter

As we get older, we eat healthier snacks. Sweets and salty foods are the top snack choices for children and teens. Beverages — including coffee, tea and soft drinks — are the snack of choice among people 35-54 years old. But healthy snacks — fruits, cheese, rice cakes, for instance — are favored by adults of 55 and older.

For more "snacking" information, contact: Elaine Howard, Market Research Corporation of America Information Services, 2115 Sanders Road, Northbrook, Ill. Phone: 1-312-480-9600.

Dietary Guidelines in the Classroom

A new kit is available to help teach USDA's *Dietary Guidelines* to junior and senior high school home economic students.

The accompanying teacher's guide features 9 lessons, reproducible activity masters, quizzes and more.

Home economic teachers can receive single free copies of the kit by writing: Teaching Kit, P.O. Box 90723, Washington, D.C. 20090-0723. Make requests on school letterhead stationery.

For more information, contact: Dianne Odland, project coordinator, USDA-HNIS, 6505 Belcrest Road, Hyattsville, Md. 20782. Phone: 1-301-436-5194.

— Irene Goins

